

**OREGON AND WASHINGTON DEPARTMENTS OF FISH AND WILDLIFE**  
**JOINT STAFF REPORT - WINTER FACT SHEET NO. 7**  
**Columbia River Compact/Joint State Hearing**  
**April 11, 2018**

***Fisheries under consideration:***

- Mainstem recreational salmon downstream of Bonneville Dam
- Below Wauna (Estuary) recreational sturgeon
- Bonneville Pool recreational sturgeon
- The Dalles Pool recreational sturgeon
- Select Area commercial

*Detailed information on stock status and management guidelines for Columbia River fisheries are presented in Joint Staff Reports, which are produced annually and available on-line. The most recent reports are the 2018 Joint Staff Report Concerning Stock Status and Fisheries for Sturgeon and Smelt (January 18, 2018) and the 2018 Spring/Summer report (February 20, 2018):*

<https://wdfw.wa.gov/publications/01973/wdfw01973.pdf> or [http://www.dfw.state.or.us/fish/OSCRP/CRM/reports/18\\_reports/2018\\_spring\\_jsr.pdf](http://www.dfw.state.or.us/fish/OSCRP/CRM/reports/18_reports/2018_spring_jsr.pdf)  
[http://www.dfw.state.or.us/fish/OSCRP/CRM/reports/18\\_reports/2018\\_wssjsr.pdf](http://www.dfw.state.or.us/fish/OSCRP/CRM/reports/18_reports/2018_wssjsr.pdf) or <https://wdfw.wa.gov/publications/01959/>

**RIVER CONDITIONS**

- Columbia River conditions as measured at Bonneville Dam are currently slightly lower, colder, and clearer than recent 5-year averages for the first half of April. Current outflow is 264 kcfs, which is lower than the recent 5-year average of 270 kcfs. Water temperature currently measures 46° F, which is colder than the average of 48° F. Visibility is 5.0 feet compared to the average of just over 4.3 feet. The river stage at Vancouver is currently 10.5 feet and is forecasted to remain similar through April 15 (Action Stage is 15.0 feet and Flood Stage is 16.0 feet).

**STOCK STATUS**

**Spring Chinook**

- Adult Chinook passage at Bonneville Dam through April 10 totals 101 fish, which is the lowest recorded cumulative count for this date. For the same in-season period, the 10-year (2008-2017) average was 2,186 fish and 5-year (2013-2017) average was 2,310 fish; on average, 1% of the run has passed Bonneville Dam by April 10. Based on the pre-season forecast and 5-year average timing, about 1,730 fish would be expected at Bonneville Dam by this date. The recent 5-yr average 50% passage date at Bonneville Dam is May 8.
- Test fishing conducted on April 8 indicates Chinook abundance in the lower mainstem Columbia continues to increase, with 2.3 Chinook per drift observed compared to 0.9 per drift on April 1. Peak Chinook per drift rates observed in recent years include 2.7 in 2016 (April 3) and 7.8 in 2017 (April 9).

**White Sturgeon**

- Abundance estimates for white sturgeon in the lower Columbia River (LCR) are derived from annual mark/recapture studies. Recent abundance estimates for legal-size fish (38-54 inches fork length (FL)) declined to a low of 72,700 fish in 2012 but increased steadily through 2016,

reaching 224,000 fish. The 2017 legal-sized abundance estimate was 199,800 and the 2018 projected abundance is 198,300. Modeling of future recruitment to legal size results in slight net growth in legal abundance by 2020 under a no-harvest scenario and a moderate decrease under various harvest scenarios.

- Abundance metrics for other size groups of white sturgeon in the LCR remain mixed. The abundance of adult-sized fish ( $\geq 167$  cm FL) increased significantly in 2017 to 10,400 fish, with the 2015-17 average abundance (6,450) now exceeding the Oregon White Sturgeon Conservation Plan (WSCP) conservation status threshold (3-year average of 3,900 adults) but still below the desired status level. Sub-yearling production in the LCR during 2017 was the highest since 2009 following seven consecutive years of reduced production. Sub-yearling catch rates in the lower Willamette River were the highest since 2010. The proportion of the population comprised of juvenile and sub-legal fish continues to decline indicating population productivity issues.

## **MANAGEMENT GUIDELINES**

### **Spring Chinook**

- Forecasts and management guidelines for 2018 Chinook fisheries were presented in Winter Fact Sheet #3 (February 21, 2018).

### **White Sturgeon**

- For years when white sturgeon retention is allowed downstream of Bonneville Dam, current Commission guidance on white sturgeon management assumes;
  - A 10% conservation buffer will be utilized if the maximum harvest rate (16%) identified in WSCP is utilized.
  - Assign 80% of the white sturgeon available for harvest to recreational fisheries and 20% to commercial fisheries.

## **2018 RECREATIONAL FISHERIES**

### **Spring Chinook**

#### ***Mainstem Columbia River Spring Chinook Fishery - Below Bonneville Dam***

- The lower Columbia River recreational spring Chinook fishery was open under temporary regulations from March 1 - April 7.
- River conditions for much of the season were excellent but the cumulative kept catch and upriver spring Chinook mortalities were less than preseason modeled expectations. The estimated Chinook catch through Saturday April 7 is 4,769 kept adult fish and 697 released from 60,472 angler trips. Steelhead catch included 92 fish kept and 122 released.
- Upriver mortalities are estimated to total approximately 3,680 adult Chinook, or 51% of the 7,157 available to this fishery prior to a run update. An upriver spring Chinook run size of 75,000 adults would cover the mortalities to date plus leave a balance for the other non-treaty fisheries.

- Given an available balance on the pre-season, buffered allocation of upriver spring Chinook (3,477 fish balance), there is potential for additional angling opportunity. Considering the limited in-season information available regarding the upriver spring Chinook run, staff recommends a conservative approach moving forward with this fishery, including shifting to a limited days-per-week structure for any additional fishery openings. This will provide additional recreational opportunity while allowing staff the time to monitor the run and catches and react appropriately.

<b><i>Recommendation: 2018 LCR Recreational Spring Chinook Fishery</i></b>	
<b>Season:</b>	Saturday April 14 and Wednesday April 18 (2 days)
<b>Area:</b>	Buoy 10 upstream to Beacon Rock (boat and bank) plus bank angling only from Beacon Rock upstream to the Bonneville Dam deadline.  Legal upstream boat boundary defined as: “A deadline marker on the Oregon bank (approximately four miles downstream from Bonneville Dam Powerhouse One) in a straight line through the western tip of Pierce Island to a deadline marker on the Washington bank at Beacon Rock.”
<b>Daily Bag limit:</b>	Two adult salmonids (Chinook, coho, or steelhead) per day, but only one may be a Chinook. Only adipose fin-clipped fish may be kept. All other permanent regulations apply.
<b>Additional Rules:</b>	Effective through May 15, the Columbia River will be open for retention of adipose fin-clipped steelhead from Buoy 10 to the Highway 395 Bridge and shad from Buoy 10 to Bonneville Dam <u>only</u> during days and in areas open for retention of adipose fin-clipped spring Chinook.  Effective through June 15, when the recreational fishery below Bonneville Dam is open to retention of Chinook, the salmonid daily bag limit in Oregon and Washington Select Areas will be the same as mainstem Columbia River bag limits. On days when the mainstem Columbia River fishery is <u>closed</u> to Chinook retention, permanent salmonid bag limit regulations apply.

- Estimating catch for this proposed extension is complicated by expected high effort, poor river conditions downstream of the Willamette River which may improve by Wednesday, and uncertainty in run timing. Staff considered these factors and has developed a catch estimate for the proposed fishery of 2,400 Chinook (2,100 kept), including 1,925 upriver mortalities from 12,500 angler trips. The projected cumulative upriver mortalities (5,605 adults) would represent 78% of the 7,157 mortalities available to the recreational fishery below Bonneville prior to a run update.
- An upriver spring Chinook run size of 108,999 adults would cover the projected cumulative mortalities plus leave a balance for the other non-treaty fisheries.
- Shifting to a limited days-per-week structure provides a controlled and systematic approach for progression of the season while allowing staff to manage within the buffered upriver spring Chinook allocation for this fishery. The Columbia River Recreational Advisory Group recommended prioritizing weekend day re-openings when possible.

- Impacts to other listed stocks are expected to remain within take limitations based on recent year results. Fishery-specific impact rate expectations can be found in the latest Spring/Summer Joint Staff Report in the 2018 Winter, Spring, and Summer Season Expectations section.
- Tributary returns of spring Chinook are typically minimal this early in the year, although a handful of fish have returned to the Lewis and Cowlitz hatcheries.
- Considering passage to date at Bonneville Dam, the most conservative approach is to apply the remaining balance of upriver spring Chinook to fishing opportunity after the in-season run update.

### **White Sturgeon**

- Due to the decline of legal-size fish and other indicators during 2008-2012, retention fisheries downstream of Bonneville Dam were closed during 2014-2016; however, based on the increasing trend for legal-size white sturgeon in the LCR during that timeframe, both Commissions approved limited retention fisheries in 2017. Sturgeon anglers made a total of 27,550 trips in the LCR in 2017. Anglers in the estuary retention fishery made 13,713 trips and kept 3,235 during a five-day retention season in June, while anglers above Wauna made 9,997 trips during a three-day retention season in October and kept 430 white sturgeon. An additional 3,860 sturgeon angler trips were made for catch and release fishing. No retention fishery occurred in the lower Willamette River due to the limited harvest guideline. The combined harvest on the lower Columbia was 3,665 white sturgeon, or 86% of the 4,245 fish guideline for mainstem fisheries. In addition to the 3,665 white sturgeon kept in 2017, anglers released 9,506 sublegal, 2,582 legal, and 209 over-legal white sturgeon and 19 green sturgeon.
- Earlier this year, staff provided updates on the LCR white sturgeon status to both Commissions and also to the Columbia River Advisor groups. Both Commissions supported implementing sturgeon retention fisheries in 2018 similar to what occurred in 2017. Input from the Advisor groups generally supported implementing 2018 fisheries in a similar fashion to what occurred in 2017, except for the area upstream of Wauna powerlines, where an earlier start was recommended.
- Staff have evaluated options for 2018 retention fisheries, with an initial focus on Estuary recreational and Select Area commercial opportunity.
- To maintain a cautious approach, staff assumed the following when modeling 2018 LCR sturgeon fisheries:
  - Continued use of the standardized legal slot of 44-50 inches fork length (FL) for all LCR fisheries to facilitate management and provide escapement of larger-size white sturgeon by excluding them from harvest.
  - Modeled a conservative 4.0% harvest rate on 44-50 inch fish (equivalent impact to broodstock escapement of a 4.8% harvest rate on the traditional 38-54 inch size slot).
  - Used the previous harvest allocation distribution for recreational fisheries of 48% Estuary, 20% Above Wauna, and 12% in the lower Willamette River.
- Based on the 2018 abundance forecast of 153,540 fish (44-50 inch FL), a total of 6,160 white sturgeon would be available for harvest downstream of Bonneville Dam.

Estimated Legal Abundance	153,540
Annual Harvest Guideline	6,160
Commercial (20%)	1,230
Recreational (80%)	4,930
Estuary	2,960
Above Wauna	1,230
Lower Willamette River	740

***Recreational White Sturgeon Fisheries***

Below Wauna Powerlines (Estuary)

- Given the limited harvest guideline, desire for a somewhat protracted fishery, and expected high effort (based on 2017 observations), staff modeling assumptions for the 2018 Estuary fishery included:
  - A mid-May start when catch rates are lower to provide for a longer retention season.
  - Continued use of the days-per-week approach and 2 PM closure to stretch out the season and provide staff the opportunity to review fishery performance on a weekly basis.
  - Daily effort in mid-May will be moderate but increase steadily into June, where catch rates are modeled at rates higher than observed in 2017.
- Results of the 2017 Estuary retention fishery provided useful data for designing the 2018 fishery but modeling this fishery remains challenging due to lack of recent May fishery data and uncertainty in predicting effort. However, staff believes the following fishery proposal represents a reasonable approach for 2018.

<b><i>Recommendation - 2018 Sturgeon Recreational Fishery for Below Wauna</i></b>		
<b>Season:</b>	Mondays, Wednesdays, and Saturdays May 14 through June 4	10 days
<b>Area:</b>	Mainstem Columbia River from the Wauna powerlines downstream to the mouth at Buoy 10, including Youngs Bay, and all adjacent Washington tributaries	
<b>Allowable Catch:</b>	Up to 2,960 white sturgeon	
	Legal size: 44-inch minimum and 50-inch maximum fork length	
	(Fork length is measured in a straight line from the tip of the nose to the fork in the caudal fin (tail) with the fish laying on its side on a flat surface, with the tape measure/ruler positioned flat <u>under</u> the fish)	
	Daily bag limit: One fish	
	Annual bag limit: Two fish	
	Retention of green sturgeon is prohibited	
<b>Additional Regulations:</b>	On days open to white sturgeon retention, angling for sturgeon is prohibited after 2 PM, including catch and release.	

- The proposed fishery is based on several modeling assumptions. The duration of the retention season will likely need to be adjusted if catch rates and effort are much different than projected.
- The proposed season precedes arrival of the Rose Festival fleet (June 6-7) which County and State enforcement identified as an issue last year.
- To avoid issues related to validation of kept fish, the proposed fishing dates are primarily not concurrent with free fishing weekends scheduled for June 2-3 in Oregon and June 9-10 in Washington. The exception is Saturday June 2; staff considered changing this date to Friday June 1 to avoid the free fishing date. However, this option does not match the current effort flight schedule (Wednesday and Saturday) which would compromise the ability to generate catch estimates in June.
- The expected kept catch for the 10-day season is 2,960 fish (100% of the guideline).
- Per permanent regulations, catch and release fishing is allowed all year (except as noted in Additional Regulations).

#### Above Wauna Powerlines

- Staff is not prepared to recommend a season structure for the area upstream of the Wauna Powerlines at this time.
- Generally, catch rates in this river section are better during the spring and late fall months; therefore opportunity for a retention fishery exists during the fall season. The 2017 season occurred in October during generally inclement weather, which negatively affected catch rates. Staff will likely consider an earlier fall opener for 2018.
- Per permanent regulations, catch and release fishing is allowed all year, except angling for sturgeon is prohibited May 1 through August 31 from Bonneville Dam downstream to a line crossing the Columbia River at Navigation Marker 82 on the Oregon shore westerly to a boundary marker on the Washington shore upstream of Fir Point.

#### Lower Willamette River

- Similar to the Above Wauna fishery, Oregon staff is not prepared to recommend a sturgeon retention season for the lower Willamette River.
- Given the reduced quota available for this fishery, a fall season would likely be considered, possibly concurrent with an above Wauna retention season.
- Per permanent regulations, catch and release fishing is allowed all year, except angling for sturgeon is prohibited May 1 through August 31 from the Lake Oswego-Oak Grove Railroad Bridge upstream to Willamette Falls.

#### Bonneville Dam upstream to McNary Dam (Zone 6)

- Under permanent rule, the 2018 Zone 6 (Bonneville Dam upstream to McNary Dam) recreational white sturgeon fisheries opened for retention effective January 1. The fishery in Bonneville Pool has been managed for a split winter/summer season since 2011; however, the

reduced guideline implemented in 2016 has made that goal more challenging. The Bonneville Pool winter season closed to retention on February 4. Fishery status for all pools are as follows:

<b>2018 Preliminary Recreational Sturgeon Harvest in Zone 6</b>				
	Guideline	Catch	Balance	Season
Bonneville Pool	325	227	98	Winter season closed Feb 4
The Dalles Pool	135	79	56	Closed January 19
John Day Pool	105	81	24	Closed February 12

- Kept catch during the Bonneville Pool winter season was 227 fish, or 70% of the 325 fish guideline leaving a balance of 98 sturgeon for a summer retention season.
- Summer harvest rates have ranged from 70-295 fish per day (weekday and weekend) since 2011. The weekday daily harvest since 2014 has averaged 80 fish (range 65-109). Harvest in 2017 was 109 fish for the one weekday of the summer fishery.
- Kept catch to date in The Dalles Pool is 79 fish, or 59% of the 135 fish guideline leaving a balance of 56 sturgeon for a summer retention season.
- Summer seasons to date have been limited to Bonneville Pool. Given the existing balance of harvestable sturgeon remaining for both Bonneville and The Dalles pools, staff proposes the following season recommendations:

<b><i>Recommendation: 2018 Bonneville Pool Recreational White Sturgeon Fishery</i></b>	
Season:	Friday June 15 (1 retention day)
Area:	Mainstem Columbia River from Bonneville Dam upstream to The Dalles Dam, including adjacent tributaries.
Sanctuary:	Angling for sturgeon prohibited during May through July from The Dalles Dam downstream 1.8 miles to a line from the east (upstream) dock at the Port of The Dalles boat ramp straight across to a marker on the Washington shore.
Allowable Catch:	White sturgeon between 38-inches and 54-inches fork length.

<b><i>Recommendation: 2018 The Dalles Pool Recreational White Sturgeon Fishery</i></b>	
Season:	Friday June 15 (1 retention day)
Area:	Mainstem Columbia River from The Dalles Dam upstream to John Day Dam, including adjacent tributaries.
Sanctuary:	Angling for sturgeon prohibited during May through July from John Day Dam downstream 2.4 miles to a line crossing the Columbia at a right angle to the thread of the river from the west end of the grain silo at Rufus, Oregon.
Allowable Catch:	White sturgeon between 43-inches and 54-inches fork length.

- Given the proposal for a weekday fishery with both pools open concurrently, effort should be dispersed reducing the likelihood of the guidelines in either pool being exceeded. Limiting the angling hours is another tool which could be utilized to potentially reduce harvest, but the savings are unknown.
- Catch and release will continue to be allowed, except in the spawning sanctuary closure areas.

## 2018 COMMERCIAL FISHERIES

### *Select Area Commercial Spring Chinook Fisheries*

- Combined Select Area landings through April 10 total 805 Chinook, or 101% of the recent 5-year average harvest of 798 spring Chinook.
- Ex-vessel price is high, with an average ex-vessel value last week slightly over \$15.00/pound.
- Fishers have requested additional Select Area fishing opportunity in Youngs Bay, Blind Slough and South Channel.
- Currently 82 upriver spring Chinook mortalities have been accrued in winter Select Area fisheries which is approximately 61% of the winter season guideline and 13% of the total non-treaty commercial allocation.
- Given the current accrual of upriver spring Chinook mortalities for the winter Select Area fisheries, staff believes some additional fishing time can be provided without modifying the current spring fishing schedule.

<b><i>Recommendation: 2018 Select Area Commercial Fisheries</i></b>
<p><b><u>Adopt</u></b> the following winter season periods:</p> <p>Youngs Bay above the Alternate Hwy 101 Bridge: 4 PM to 8 PM Thursday April 12</p> <p>Youngs Bay (Walluski Area): 7 PM to 11 PM Monday April 16</p> <p>South Channel only: 11 PM Thursday April 12 to 3 AM Friday April 13 8:30 PM Monday April 16 to 12:30 AM Tuesday April 17</p> <p>Blind Slough only: 7 PM Thursday April 12 to 7 AM Friday April 13 7 PM Monday April 16 to 7 AM Tuesday April 17</p> <p>All other previously adopted regulations specific to each site remain in effect.</p>

- Due to the relatively low abundance of upriver spring Chinook to date and the combination of short tide-based periods and restricted fishery areas, staff anticipates the recommendation will

not exceed winter season upriver harvest expectations and will not affect the current spring fishing schedule.

- These modifications do not significantly affect the expected impacts to wild winter steelhead or wild Willamette spring Chinook outlined in the 2018 spring Joint Staff Report (0.03% and 1.74%, respectively).

***Select Area Commercial White Sturgeon Fisheries***

- The 2018 commercial white sturgeon allocation is 1,230 fish, compared to 1,245 in 2017.
- In 2017, commercial sturgeon landings were 724 (59%) in mainstem fall fisheries and 503 (41%) in Select Area fisheries.
- Staff recommends allowing sturgeon retention in spring Select Area fisheries with a limited weekly landing limit, and setting fishery-specific allocations at a later date.

<b><i>Recommendation - 2018 Select Area Commercial White Sturgeon Retention</i></b>
Effective April 19, a maximum of <b>two</b> white sturgeon with a fork length of 44-50 inches may be possessed or sold by each participating vessel during each calendar week (Sunday through Saturday). The two white sturgeon possession and sales limit includes all Select Area fisheries.

**FUTURE MEETINGS**

- No additional Compact or Joint State hearings are scheduled at this time. The Joint Staff will monitor fisheries and recommend additional hearings as needed.